

ESC 2 0126

**SOUND-ABSORBING COMPOSITES AND  
SHIELD DEVICES EMPLOYING SAME**

**ABSTRACT OF THE DISCLOSURE**

5 A sound-absorbing shield device for use in a vehicle door comprises a sheet of sound-absorbing material and a thin sheet of polymer film. A first face of the polymer film is attached to the sound absorbing material and a plurality of apertures extending through the polymer film from the first  
10 face thereof to a second face thereof opposite the first face. Each aperture is bounded by a hollow protrusion extending from the second film face, whereby the apertures and protrusions cooperate to form a barrier against moisture or other environmental contamination while admitting acoustic energy  
15 therethrough into the sound absorbing material.